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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,138	10/29/2003	Michael M. Walters	50202 (SE-2011-IP)	5503

7590 07/27/2005

CHARLES E. WANDS, ESQ.
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST, P.A.
255 SOUTH ORANGE AVENUE, SUITE 1401
P.O. BOX 3791
ORLANDO, FL 32802-3791

EXAMINER

STERRETT, JEFFREY L

ART UNIT PAPER NUMBER

2838

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,138

Applicant(s)

WALTERS ET AL.

Examiner

Jeffrey L. Sterrett

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

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1. Claims 9 and 10 are objected to because in line 3 of claim 9 "has" is superfluous.

Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Kates (US 6,577,515).

Kates discloses a multiphase DC/DC converter (see lines 35-38 of column 2) comprising a plurality of DC/DC converter channels (125/225/325 and 150/250) having outputs combined at an output (50) providing DC power to a load (185) wherein different DC/DC power converter channels have different power conversion efficiencies and response times (see lines 41 and 45 of column 2) and the output inductance of a first DC/DC power converter channel is greater than the output inductance of a second DC/DC power converter channel (see lines 12-13 of the abstract).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 11-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kates .

Kates discloses a multiphase DC/DC converter as explained above and as recited by claims 6 and 11-13 except for utilizing plural second converters. Official notice is taken that a multiphase DC/DC converter utilizing plural converters was old and known in the art at the time of the invention (see lines 35-38 of column 2 of Kates for example). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the multiphase DC/DC converter of Kates by utilizing plural second converters since Kates already explicitly set forth that converter 125/225/325 may be one of many converters and by logical extension converter 150/250 could just as easily be one of many converters as per the statement in lines 33-37 of column 6 of Kates in order to provide more power to the load without stressing a single converter as was often done in the art at the time of the invention.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Amin (US 6,636,023) is cited to show a multiphase DC/DC converter old and known in the art at the time of the invention that could be consider to read upon claims 1-3, 7, and 8 under 35 U.S.C. 102(a).

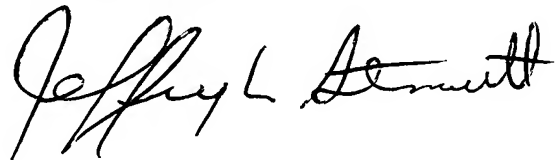
Smith (US 5,309,344), Keller (US 6,134,129), Kadatsky (US 6,381,155), Siri (US 6,433,522), Clarkin et al (US 6,465,993), Ledenev et al (US 6,545,450), Brooks (US 6,605,931), Markowski et al (US 6,696,882), Schrom et al (US 6,801,026), and Schuellein et al (US 6,806,689) are cited to show multiphase DC/DC converters old and known in the art at the time of the invention.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Sterrett whose telephone number is (571) 272-2085. The examiner can normally be reached on Monday-Thursday & 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey L. Sterrett
Primary Examiner
Art Unit 2838

A handwritten signature in black ink, appearing to read "Jeffrey L. Sterrett", written in a cursive style.